



# CHEMICAL HAZARD

An intentional Chemical Hazard (Attack) is defined as the spreading of toxic chemicals with the intent to do harm. A wide variety of chemicals could be made, stolen, or otherwise acquired for use in an attack. Industrial chemical plants or the vehicles used to transport chemicals could also be sabotaged. An unintentional Chemical Substance Release, or Hazmat event occurs when a chemical with the potential to cause harm is accidentally released into the environment. Hazardous materials come in the form of explosives, flammable and combustible substances, and poisons. Hazardous chemicals are used in various industries, and accidental exposure to these chemicals may occur if they are not stored correctly, if safety control malfunction, or if safety procedures are not followed.



## HAS IT HAPPENED LOCALLY?

There have been five small-scale Chemical Attack Hazard events in Howard County between 2004-2019. There have been 478 Unintentional Chemical Substance Release/Hazmat responses involving chemical release, chemical reaction, or toxic conditions in Howard County during the reviewed time period. This totals to an estimated 438 Chemical Hazard events in Howard County from 2004-2019. A large percentage of Unintentional Chemical Substance Release/Hazmat events in Howard County involve hydrocarbon spills such as oil, gasoline, or diesel fuel. Unintentional Chemical Substance Release/Hazmat hazards are also common in a household setting and typically involve the accidental release of mercury or other household chemicals.

## WHAT IS THE ONGOING RISK?

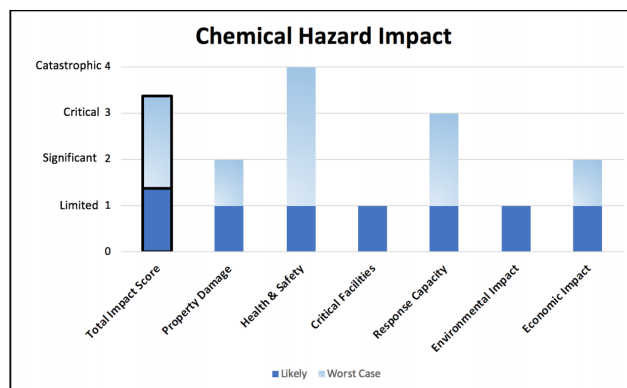
There is an expected 1-30% Chance of Annual Occurrence of a Chemical Hazard in Howard County. In the most likely Chemical Hazard scenario, the Total Impact is considered Limited-Significant. In the worst-case scenario, the Total Impact is considered Critical-Catastrophic.

## DID YOU KNOW?

- Most health effects from a Chemical Hazard event occur in the minutes immediately following the attack.
- Inhalation or skin absorption of many chemical agents can cause permanent health problems or death in some instances.

## FOR MORE INFORMATION:

- [Howard County Hazard Identification and Risk Assessment](#)
- [U.S. Department of Homeland Security](#)
- [Ready.gov](#)
- [Centers for Disease Control and Prevention](#)



Chemical Hazard Risk Profile				
	Risk Assessment Category	Likely Hazard Scenario	Worst-Case Hazard Scenario	Weight
LIKELIHOOD	Likelihood	1.3 Infrequent-Likely	3.3 Critical-Catastrophic	50%
	Impact	4 Limited-Significant	4 Critical-Catastrophic	40%
CONSEQUENCE	Warning Time	4 Short	4 Short	5%
	Duration	1 Short	2 Moderate	5%
TOTAL RISK SCORE		1.8	2.7	

